



FORT WORTH ACCESS CONTROL CODES

CODES FROM THE 2003 IBC AND 2003 IFC

IBC SECTION 1008

**IBC Section 1008.1; add a sentence to the first paragraph to read as follows:*

Security devices affecting means of egress shall be subject to approval of the Fire Code Official. (See Fire Code, Section 1027.2)

**IBC Section 1008.1.3.4; changed to read as follows:*

1008.1.3.4 Access-controlled egress doors/Electronic locking devices. Devices that restrict or control access or exiting through the use of an electrical or electronic means present specific hazards. These devices include but are not limited to magnetic locks, electric strikes, electrical doorknobs(includes levers), card readers, motion detectors and electronic panic hardware.

Regardless of the location of the device or the level of security desired, the ability to exit at the option of the individual, not the controlling authority, must always be provided.

Exceptions: 1. Locations for occupants needing self protection because of reduced mental capacities such as mental hospitals or Alzheimer care as further specified in Section 1008.1.3.4.2.

2. Locations where national security interest are present with approval of the Construction and Fire Prevention Board.

(Note: For interior locations such as elevator lobbies, access includes passage into and through the tenant space being secured to provide access to the stairway. If access through the secured area is not desired, another exiting method such as provided a public corridor to the stairway should be utilized.)

1008.1.3.4.1 General. Electronic locking devices installed in such a manner that the method of unrestricted exiting relies upon electricity or electronics instead of mechanical means shall comply with the provisions as set forth herein. General guidelines for such installation shall be as follows:

1. Access to exits, even in non-fire situations, shall be available to all individuals, even those individuals that are considered as unauthorized. Manually activated release mechanisms shall be made available. For specific provisions and exceptions, see Section 1008.1.3.4.2.

2. For emergency situations, buildings must be provided with an automatic release mechanism as specified in Section 1008.1.3.4.3.
3. Once released, the door shall swing freely as a push/pull door. For specific provisions and exceptions, see Section 1008.1.3.4.4.
4. Request to exit buttons, break glass boxes and emergency pull boxes, with their required signs, shall be installed in accordance with Sections 1008.1.3.4.2 and 1008.1.3.4.5.
5. All devices used in a fire rated/fire door situation shall be approved for such use.

1008.1.3.4.2 Access to exits/Manual release mechanisms. Passage through the secured door shall be provided.

(Note: Under usual circumstances, passage by individuals on the inside, going to the outside, is made available. Controls are usually installed to prevent unauthorized entry. Examples of such installations are the lobby entrance doors where exiting is by pushing the exit button.)

Normal passage shall be provided with the use of an approved button installed in accordance with Section 1008.1.3.4.5. Other acceptable normal release methods may include options as follows:

1. Pushing on or making contact with an approved electronic release bar. Such bars must be installed such that they will fail in the released position should the electrical connection with the bar be lost.
2. Use of an approved motion detector. Upon detection of an approach, the device will unlatch. When using a motion detector, a release button in accordance with Section 1008.1.3.4.5 is still required to be installed in case of failure or inaccurate detection of the motion device.

When access to the exits requires passage through the device, manual release mechanisms shall be made available.

(Note: Examples of such installations that must provide a manual override method are as follows:

- 1. Elevator lobbies on full floor tenants. Access to the exit stairs is controlled and the exit path is through the device and tenant space. To permit access to the stairs, a manual override system must be installed.*
- 2. Warehouses/factories where employees are required to enter and exit through one point. Use of other building exits is undesired and controlled. A manual override system must still be installed at the controlled exits.*
- 3. Secured systems where employee ingress/egress is monitored at all secured doors. A manual override system must still be installed at each door.*
- 4. Occupancies like jewelry stores where the desire is to buzz entry and exit. Buzzing entry is acceptable. Buzzing exit may be used but a manual override system must still be installed at the door.)*

When passage of individuals is undesired, unless other approved exits are available, access at the option of the individual shall be provided. Acceptable release methods may include options as follows:

1. An emergency pull box or a break glass emergency box may be located adjacent to the door to activate the release in an emergency. Choice of box must be approved by the Fire Chief so as not to be confused with any other alarm boxes. An approved sign shall be adjacent to the box with the appropriate message such as "Pull to Open Door" or "Break Glass to Open Door."
2. When approved by the Code Official, a release button will not be required for buildings provided with an approved automatic sprinkler system throughout with monitored 24-hour security personnel on site, if a means for two-way communication with security such as intercom or telephone is provided in an approved location. Controls shall be provided at the security station for unlatching the electronic device. The two-way communication system shall be wired through a supervised circuit as defined in the Fire Code.
3. In I Occupancies provided with an approved automatic sprinkler system throughout, the release button will not be required provided a control for releasing the device is provided at a nurse station and a deactivation method, eg. a keyed control, a control pad, or card reader, is provided at the door and staff is supplied with the appropriate tool or knowledge to operate the release mechanism.

1008.1.3.4.3 Automatic release mechanisms. Electronic locking devices shall have automatic releasing that complies with the following:

1. Automatically release upon activation of the smoke detection or fire alarm system, if provided. The control devices shall remain unlocked until the system has been reset.
1. When the area of concern has a sprinkler system, automatically release upon activation of a waterflow alarm or trouble signal. The control devices shall remain unlocked until the system is reset.
3. Automatically release upon loss of electrical power to the building or to the electronic device. Locking mechanisms shall not be provided with emergency backup power such as generators or batteries.
4. Automatically release upon activation of a manual release mechanism as specified in Section 1008.1.3.4.2 and as further specified in Section 1008.1.3.4.5.

*(Note: When security is still desired after the automatic release of the system, or when positive latching is necessary for fire door installation, it is still possible to maintain security provided the appropriate combination of devices is installed. As an example, use of panic hardware or doorknobs that provide mechanical exiting **at all times**, but do not function from the exterior unless electronically activated, will still provide a secured door. It will provide the required manually exiting but entry by card or code is not available until the system resets.*

No such provision can be used when passage through the device is necessary for access is to the exit. As an example, when the elevator lobby is secured from the exit stairs by a full floor tenant, upon automatic activation those devices must release and access be provided through the tenant space to the stairs. A manual locking system cannot be installed to insure security.)

1008.1.3.4.4 Door swing freely/Single exit motion. Doors shall swing freely when the device is released.

(Note: It is required that the exit motion require only one activity. With normal doors, one activity is pushing the mechanical panic bar or turning the mechanical doorknob. With an electronic device, one motion is pushing the button; therefore, pushing the button and pushing a panic bar or turning a doorknob would be two activities.

An acceptable alternative is to use a motion detector (push button is still required). The motion detector will release the device upon approach and turning the doorknob is now just one activity. The push button is only necessary should the motion device fail.

Another option is to use an electronic panic bar. One motion, pushing the bar, is for exiting but entry is controlled. Or, use of an electronic doorknob where exiting is always mechanical but the entry side does not engage without electronic activation.)

Exception: When doors are required to have positive latching, the Building Official and Fire Chief shall determine:

1. If a double motion to exit, ie. the release of the electronic device then the operation of a door knob or push bar, is an acceptable exit means; or,
2. If the latch should be designed to fail in the secure position; or,
3. Whether to deny the usage of the locks.

1008.1.3.4.5 Request to exit buttons/Break glass boxes/ Emergency pull boxes. Exit buttons, break glass boxes and emergency pull boxes shall be installed as follows:

1. **Button:** The release button shall be red in color and at least a 2" Mushroom Switch or 2" Square Lexan Palm Button.
2. **Location:** The button, break glass box or emergency pull box shall be located 40 inches (1016 mm) to 48 inches (1219 mm) vertically above the floor and within 5 feet (1524 mm) of the secured doors. Ready access shall be provided to the manual unlocking device.
3. **Sign:** An approved sign shall be adjacent to the button, break glass box or emergency pull box with the words "Push to Exit" or "Pull to Exit" as applicable. Sign lettering shall be white on a red background and at least one (1) inch (25 mm) in height and shall have a stroke of not less than one-eighth (1/8) inch (3.2 mm).
4. **Activation:** When operated, the manual unlocking device shall result in direct interruption of power to the device, independent of the access control system electronics, and the device shall remain unlocked for a minimum of 10 seconds. It shall not be required that the release mechanism be constantly held, such as holding down the button, to get out.

(Note: When buzzing someone out, holding down the button is acceptable; however, the manual release device installed at the door, even those required in the occupancy using buzzing, shall not require constant holding down to exit.)

5. **Time Delay:** Exit devices shall not possess a time delay option. (If time delay is approved as a variance, compliance with Fire Code Section 907.2.15 and Building Code Section 1008.1.8.6 shall also be required.)

**IBC Section 1008.1.8.6; delete. (See Section 1008.1.3.4.5, item 5)*

**IBC Section 1008.1.8.7; change exception #2 to read as follows:*

2. This section shall not apply to doors arranged in accordance with Section 403.12 or approved access-controlled doors of Section 1008.1.3.2.